

A plausible explanation of this phenomenon may rest on the fact that the globulins and allied substances are combined with the phosphatids.<sup>2</sup> It is conceivable that the latter may be responsible for this palliative action. This contention is based on the results obtained in a limited number of cases of inoperable malignancy, where phospholipin emulsion was used. Its pain-alleviating action was quite pronounced. Where such palliation did occur, the patient was free from pain from twenty-four to forty-eight hours. It would seem, then, that this attribute of pain alleviation cannot be made a specific property of the suprarenal extract.

Concerning the effect of the suprarenal extract on blood cholesterol it was found by a number of investigators<sup>3</sup> that feeding whole thyroid, KI, and certain fractions of the phosphatids produced the same result. In addition I had an occasion to observe in a limited number of trials, both animal and human, that, after repeated injections of the suprarenal extract, the blood cholesterol returned to its original level within ten to fourteen days. This manifestation is also observed after a prolonged use of certain phospholipins.

Incidentally, I wish to state that at no time have I noted definite retrogressive changes in malignant growths after the administration of the glandular aqueous extracts, either in humans or in experimental animals (Flexner Jubling rat carcinoma).

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#### REFERENCES

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### BLADDER IRRITABILITY DUE TO CARELESS OPERATIVE TECHNIQUE

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I WISH to cite two recent experiences which may serve as a timely warning to those who are performing surgery in regions adjacent to the bladder. Symptoms of disturbed urination following various types of pelvic surgery, especially in the female, are not uncommon. Fortunately, the vast majority disappear in a brief time after appropriate simple treatments are given. There is, however, a small group of patients whose persistent, annoying bladder symptoms make their life most miserable. They are frequently passed between gynecologist and urologist without receiving any real or lasting benefit. Only those of us who have had patients of this type can know the misery which they endure and the futility of our efforts to relieve them.

The majority of these patients have their post-operative symptoms because of ill-chosen or poorly performed surgery. Under the former grouping, one might mention the many women whose urinary

frequency had been unaffected by a perineal repair and uterine suspension because the symptoms were entirely due to a contracted bladder resulting from a chronic cystitis of many years' duration.

I wish to comment particularly, because of two patients whom I have recently seen, on the individuals having persistent bladder symptoms due to faulty operative technique: One had been operated upon by a urologist and the other by a gynecologist.

#### REPORT OF CASES

CASE 1.—The first patient, a woman of fifty-five, came to me because of "severe bladder cramps," which would occur periodically and persist intermittently for as long as three days. She could determine no exciting factor except constipation. Her symptoms began some three months following an exploratory laparotomy ten years previously. She thought her uterus had been removed at that time. Examination of her pelvis revealed a firm, slightly tender mass, which might have been either an atrophic uterus or a generous cervical stump with numerous adhesions. A catheterized urine specimen showed no pus. When the bladder was filled with 200 cubic centimeters of sterile solution she would complain of its aching, but did not have any spasmodic voiding. At cystoscopy the bladder appeared normal.

This patient continued to be miserable and, at her request, her abdomen was explored. At the previous operation a hysterectomy had been done, and the stump of the cervix had become fixed rather high on the bladder wall, toward the fundus. I could not determine whether it had been fixed there originally or had become attached by adhesions. This cervical attachment was so situated that, as the bladder filled, it seriously interfered with the normal expansion of that organ, and was undoubtedly the cause of her symptoms. When this attachment was freed, the cervix descended and the bladder was able to expand normally.

CASE 2.—The second patient, a seventy-year-old woman, had a desire to void when lying down and, on answering the urge, could produce only a small quantity of urine. The symptoms were scarcely noticeable when standing. She had had a partial excision of the bladder for a "chronic ulcer" some twelve years previously, and the present symptoms dated from that time. Cystoscopy revealed nothing abnormal, except a mild trigonitis. I performed a peritoneoscopy with the Ruddock peritoneoscope, and found that the uterus lay in a horizontal position, and was firmly attached to the entire dome of the bladder. It was fixed so that the fundus of the uterus almost touched the symphysis. When the bladder was filled the uterus kept approximately this same position. When the patient was placed in a Trendelenburg position, with the bladder empty, the uterus could be seen to have tilted slightly backward, producing some tension on the bladder. With the uterus in this position, the patient had a painful desire to void, but when encouraged to do so, could not. When she was replaced in the horizontal position the uterus was seen to fall forward, and the patient was immediately relieved of her symptoms.

#### COMMENT

This first woman had urinary symptoms because of faulty fixation of the cervical stump, following hysterectomy. The second patient had her symptoms because the uterus had apparently been used to close or reinforce a defect in the dome of the bladder.

I cite these two experiences to show the misery which patients may be forced to endure because of faulty or careless surgery done in the pelvis. Though the bladder is an elastic organ capable of remarkable regeneration and adaptation, it should, none the less, be treated with proper surgical consideration by both gynecologist and urologist.

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